

Fig. 1

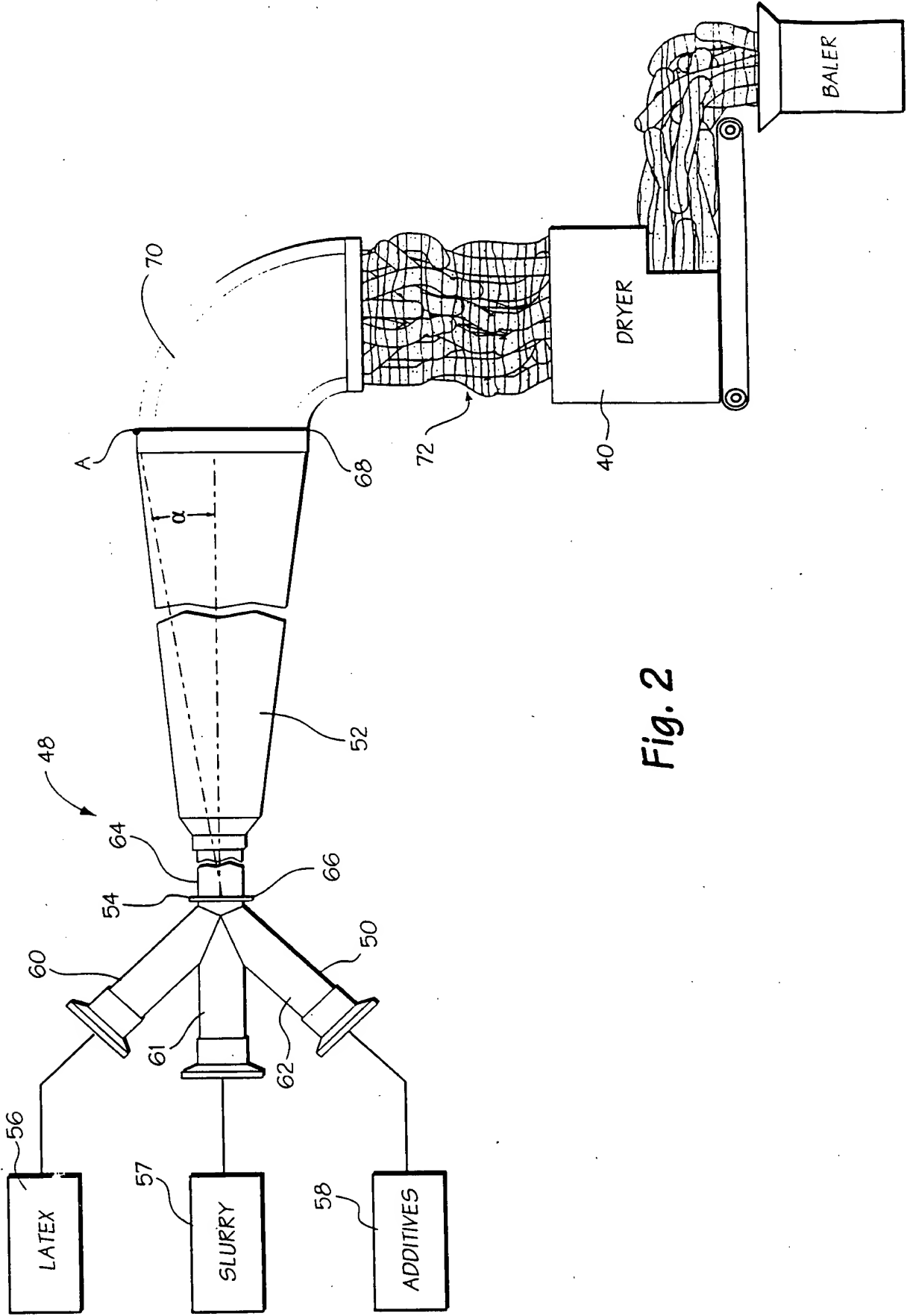
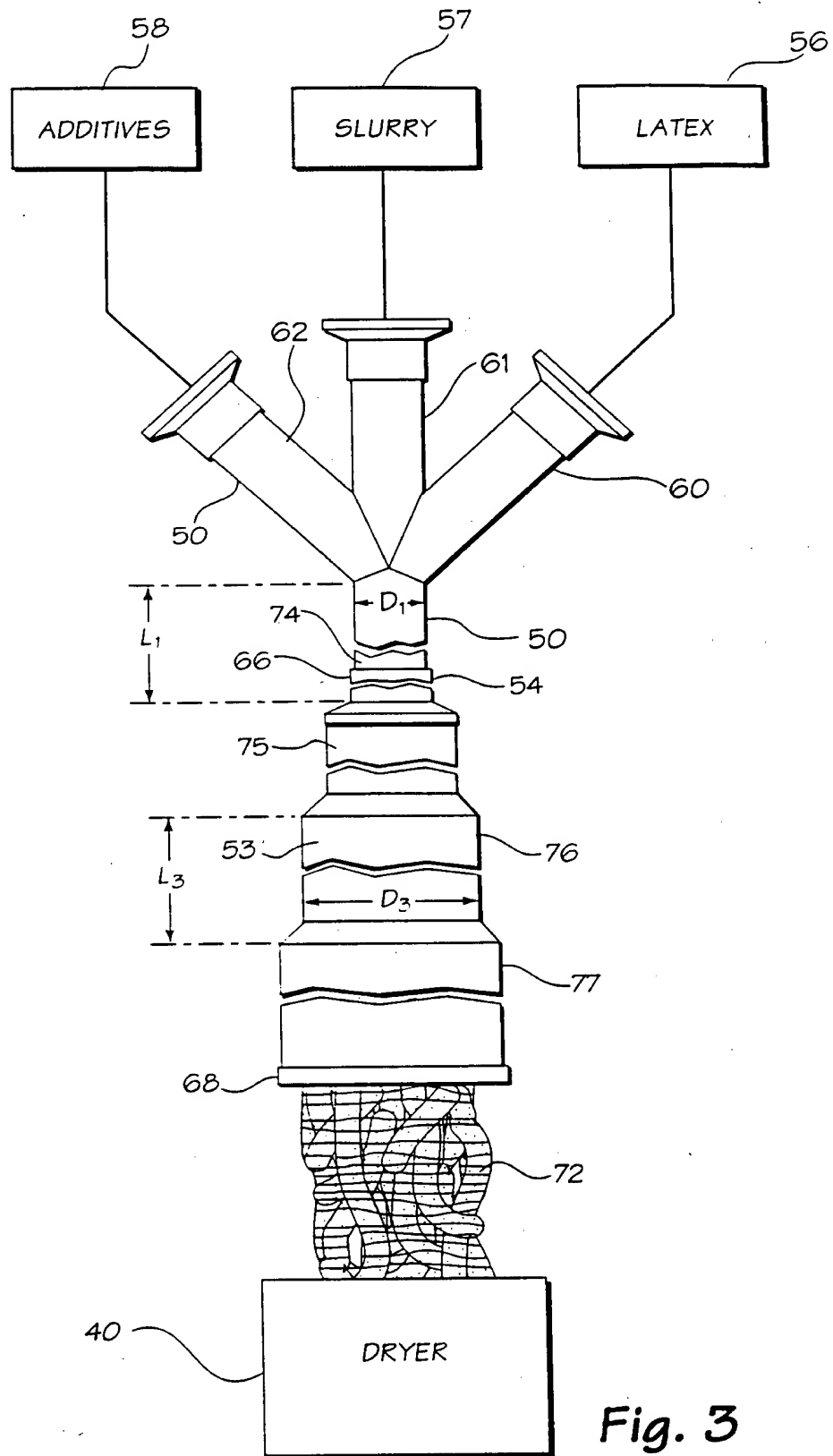
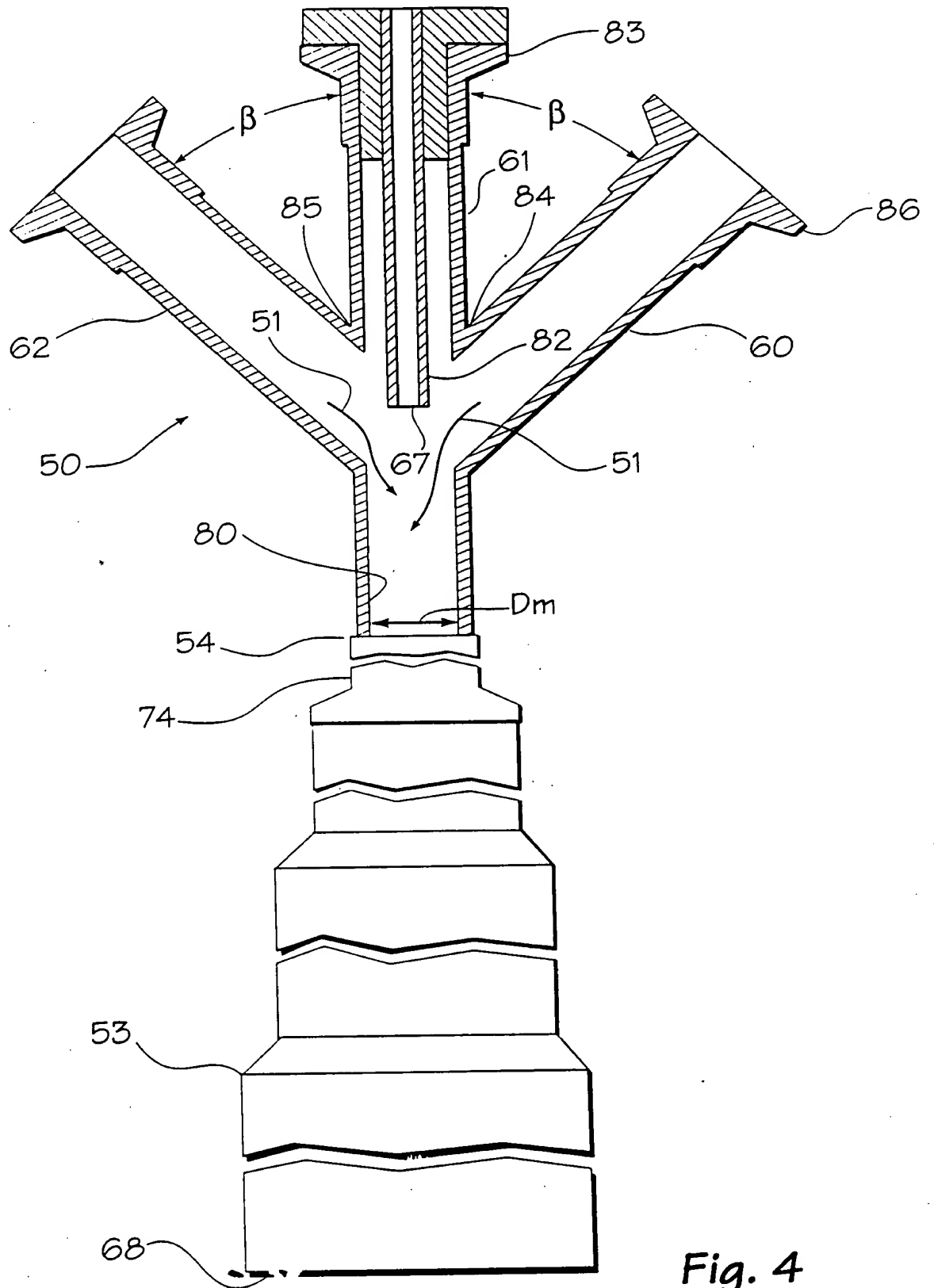


Fig. 2

00023441.032597





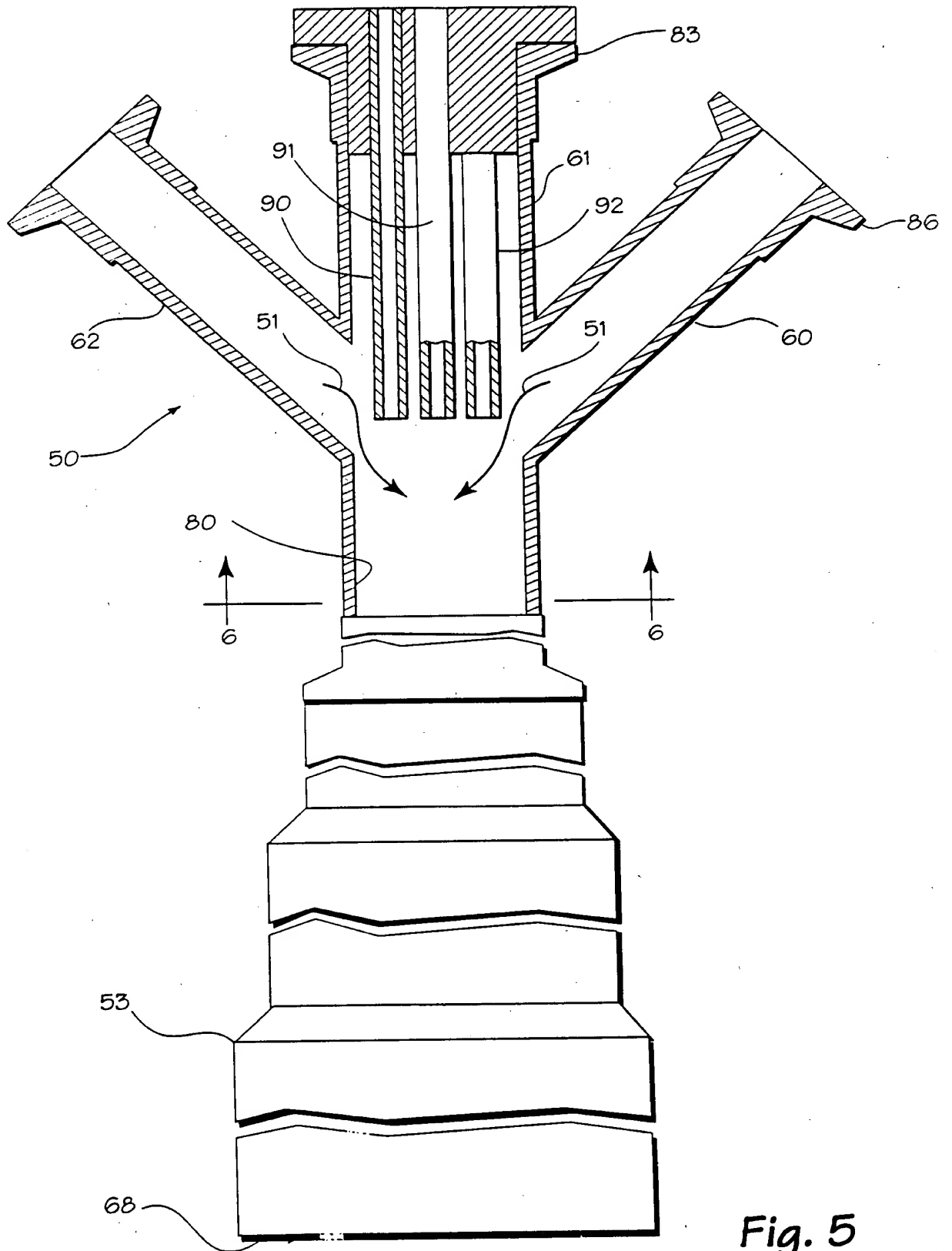
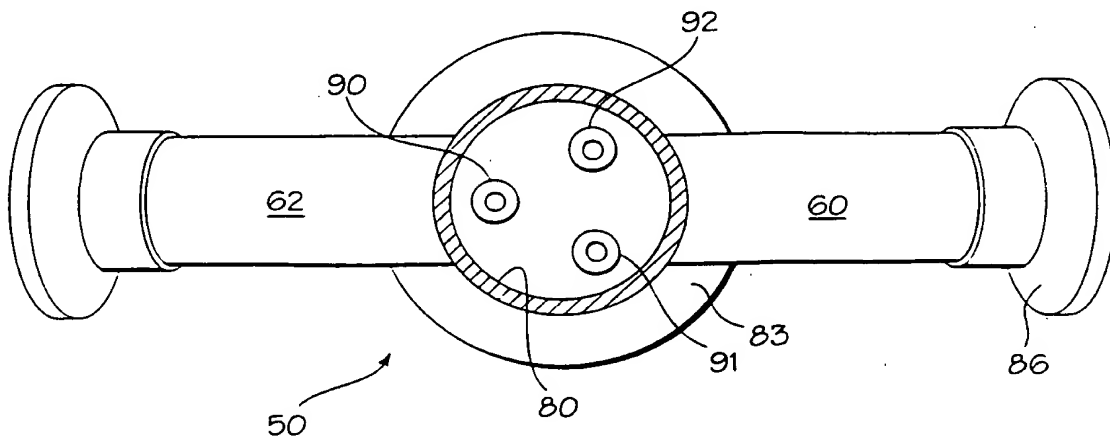
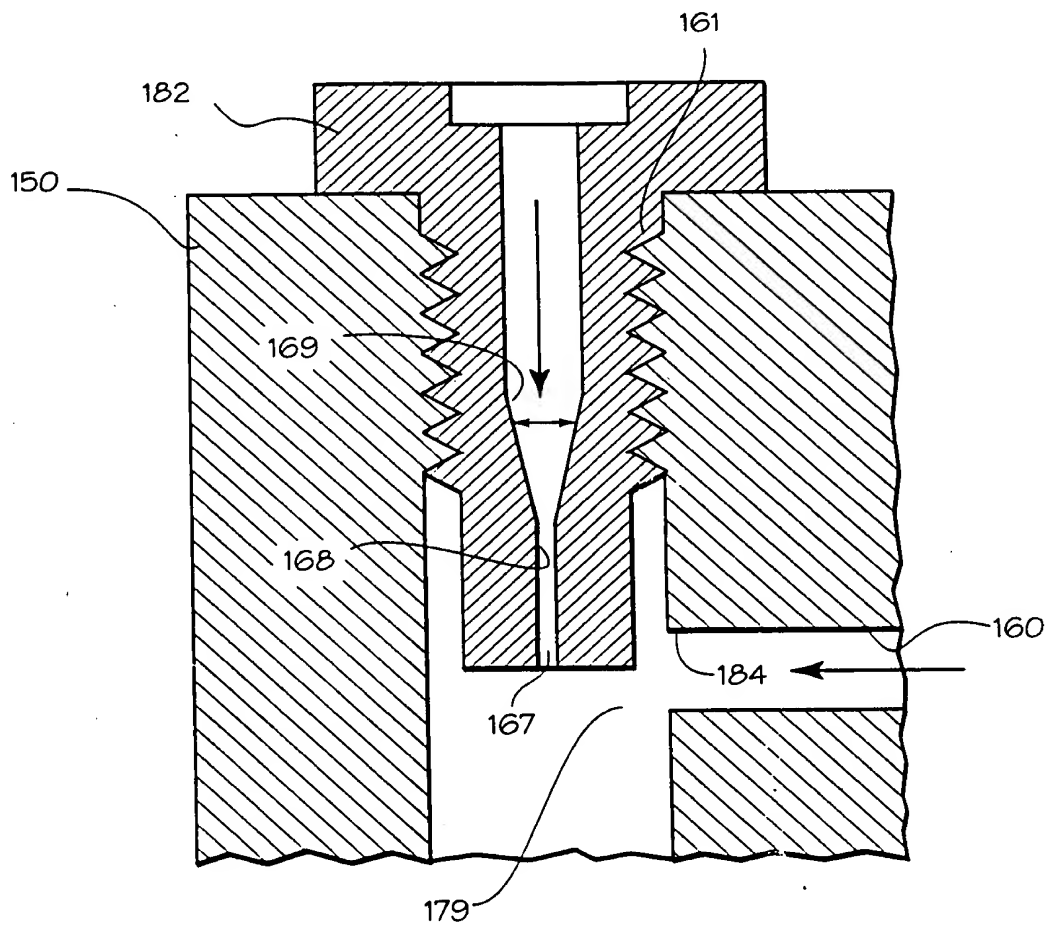


Fig. 5

08333441.032597  
 465250 THE2080



**Fig. 6**



**Fig. 7**

08823411.032597  
/65250" TT4E2880

Figure 8 Carbon Black Morphology Map

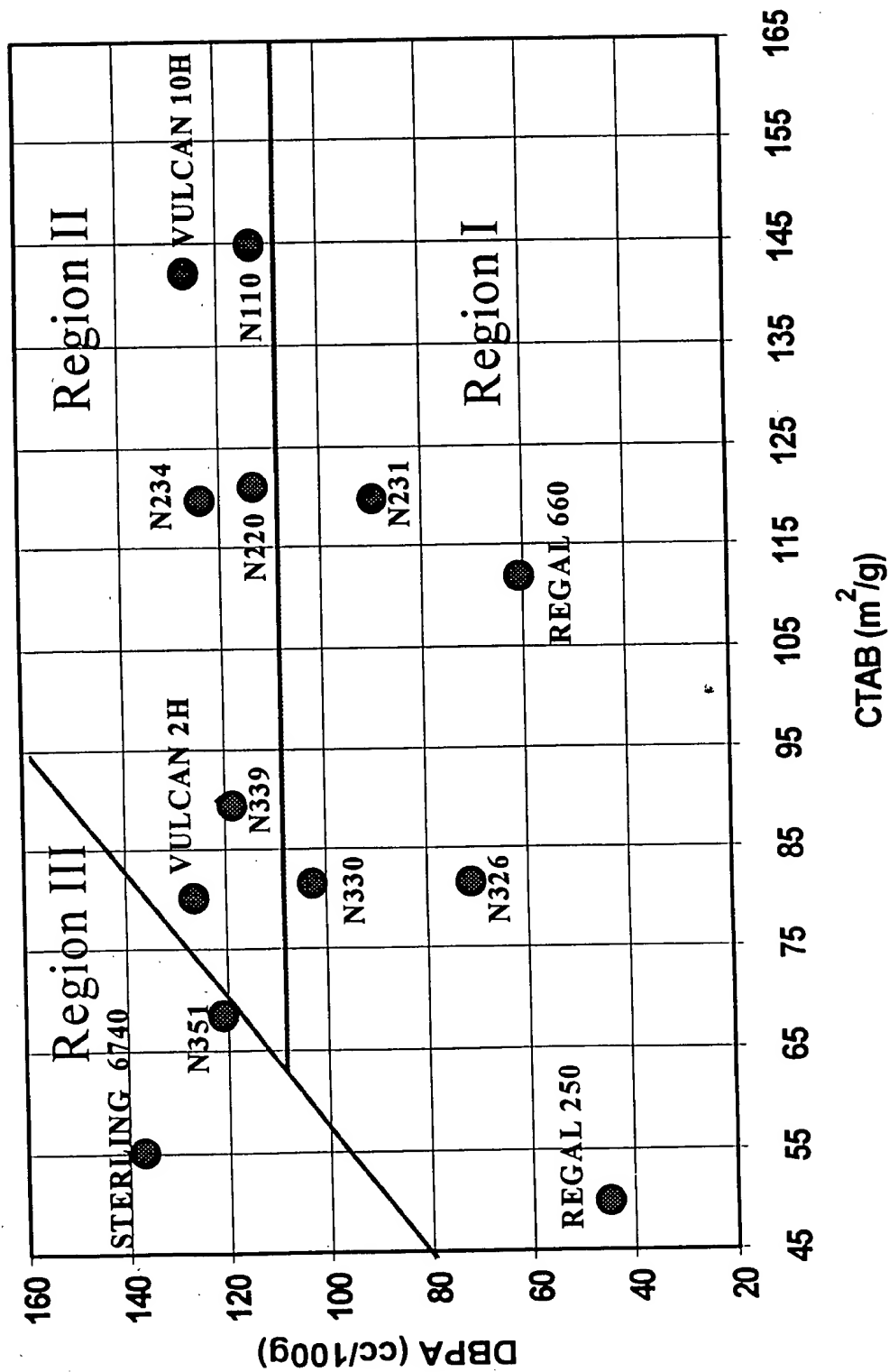


Figure 9 Dispersion Quality and MW<sub>sol</sub> of NR Masterbatches

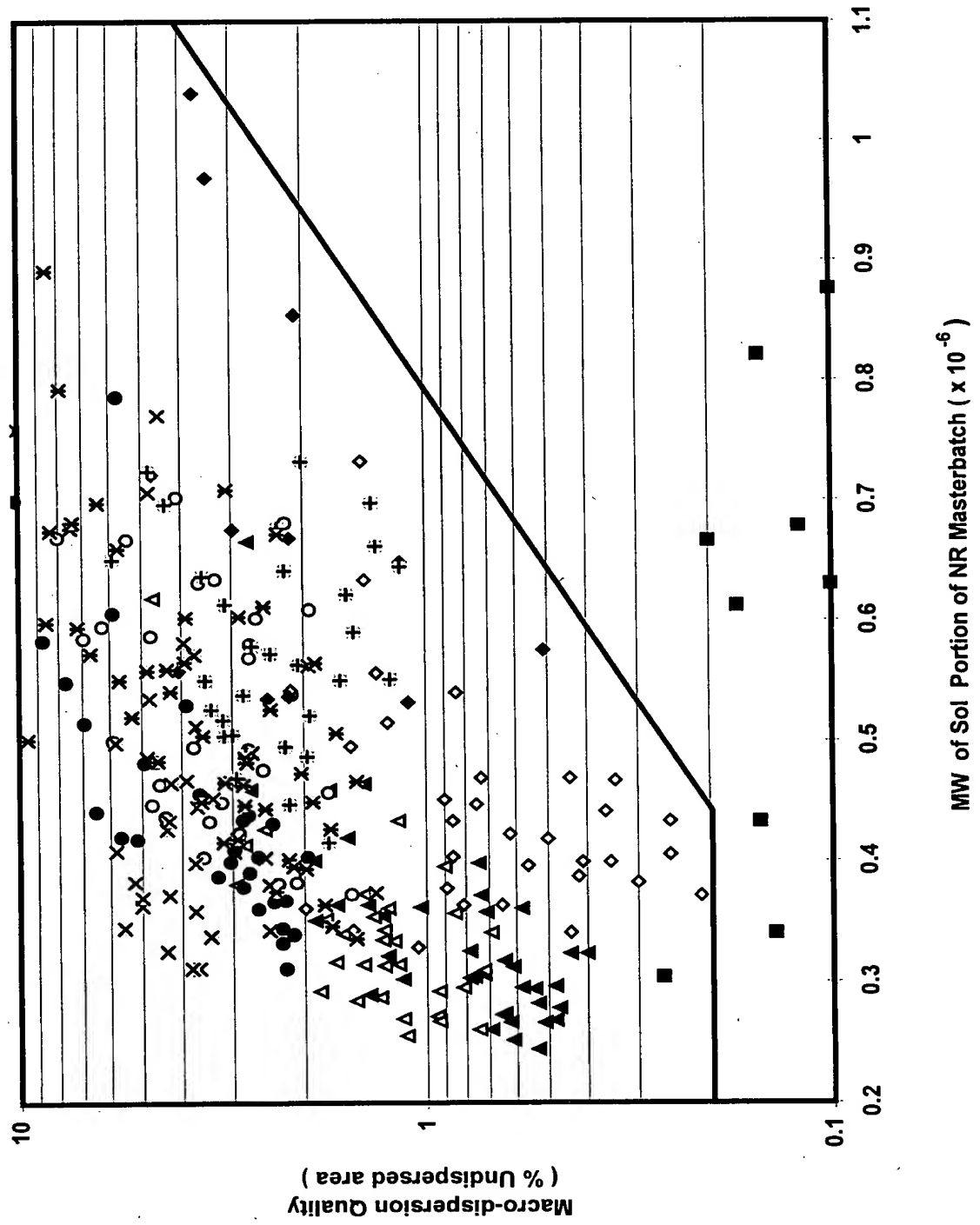




Figure 10 Dispersion Quality and MW<sub>sol</sub> of NR Masterbatches  
(Region I)

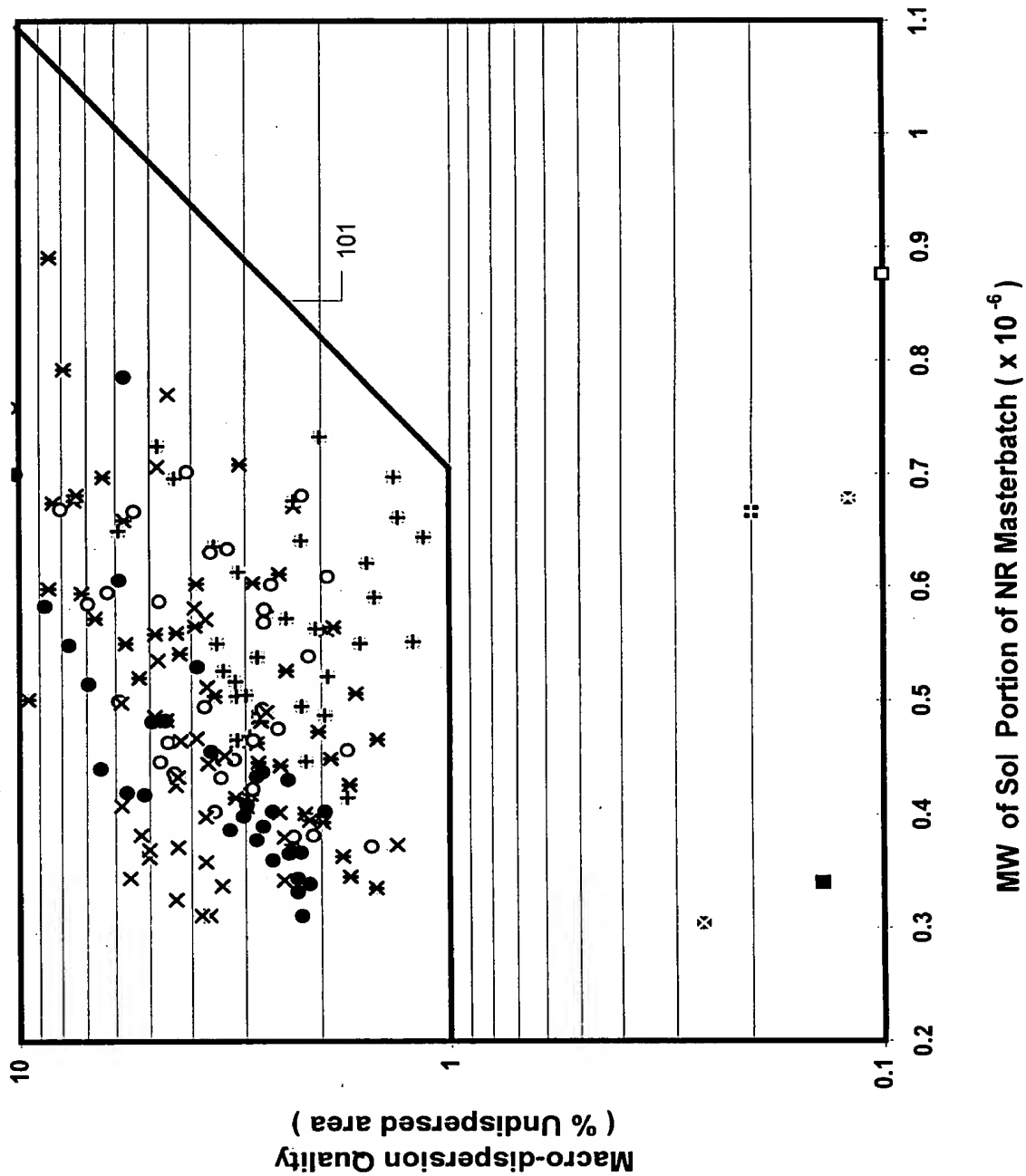


Figure 11 Dispersion Quality and  $MW_{sol}$  of NR Masterbatches  
(Region II)

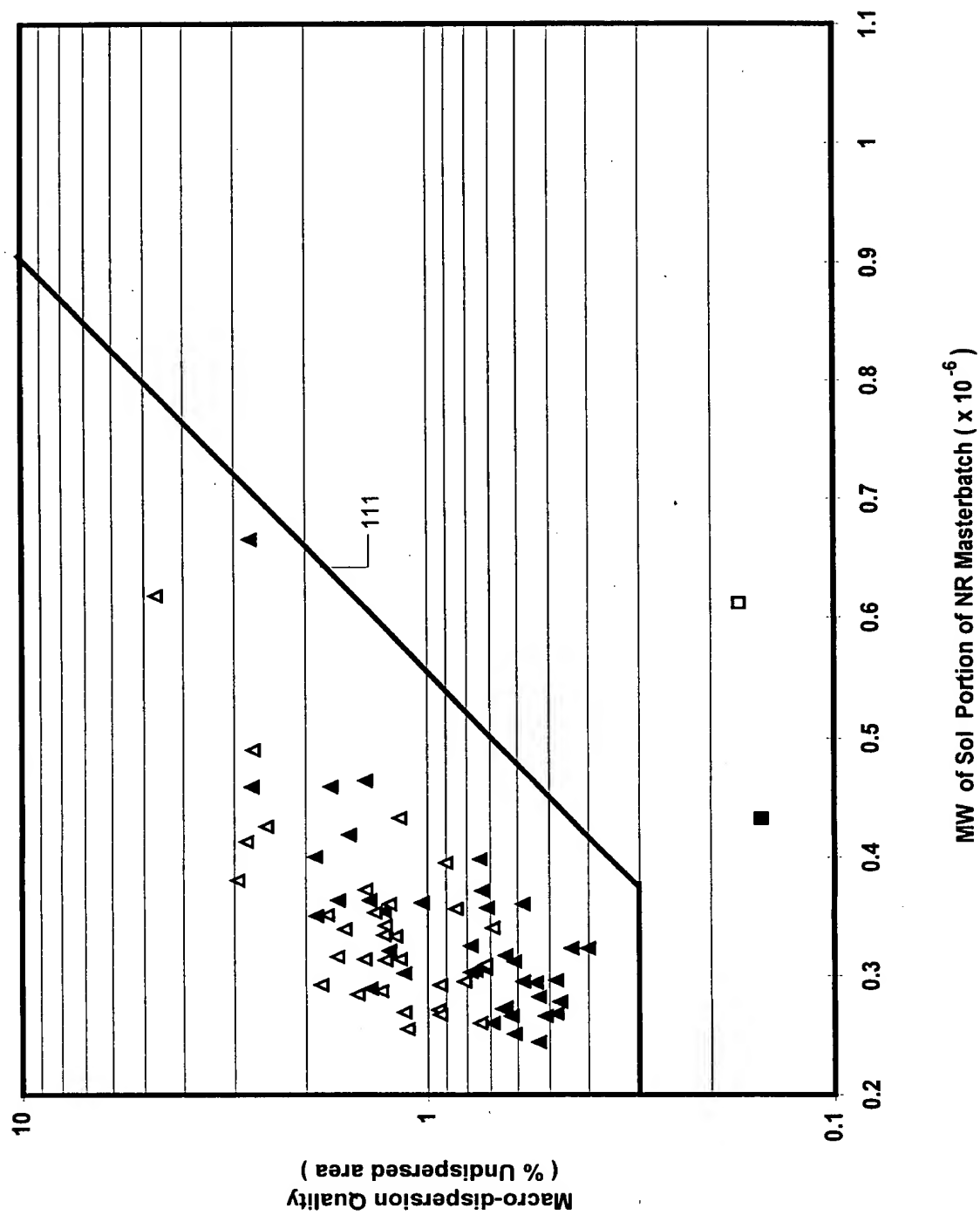


Figure 12 Dispersion Quality and  $MW_{sol}$  of NR Masterbatch  
(Region III)

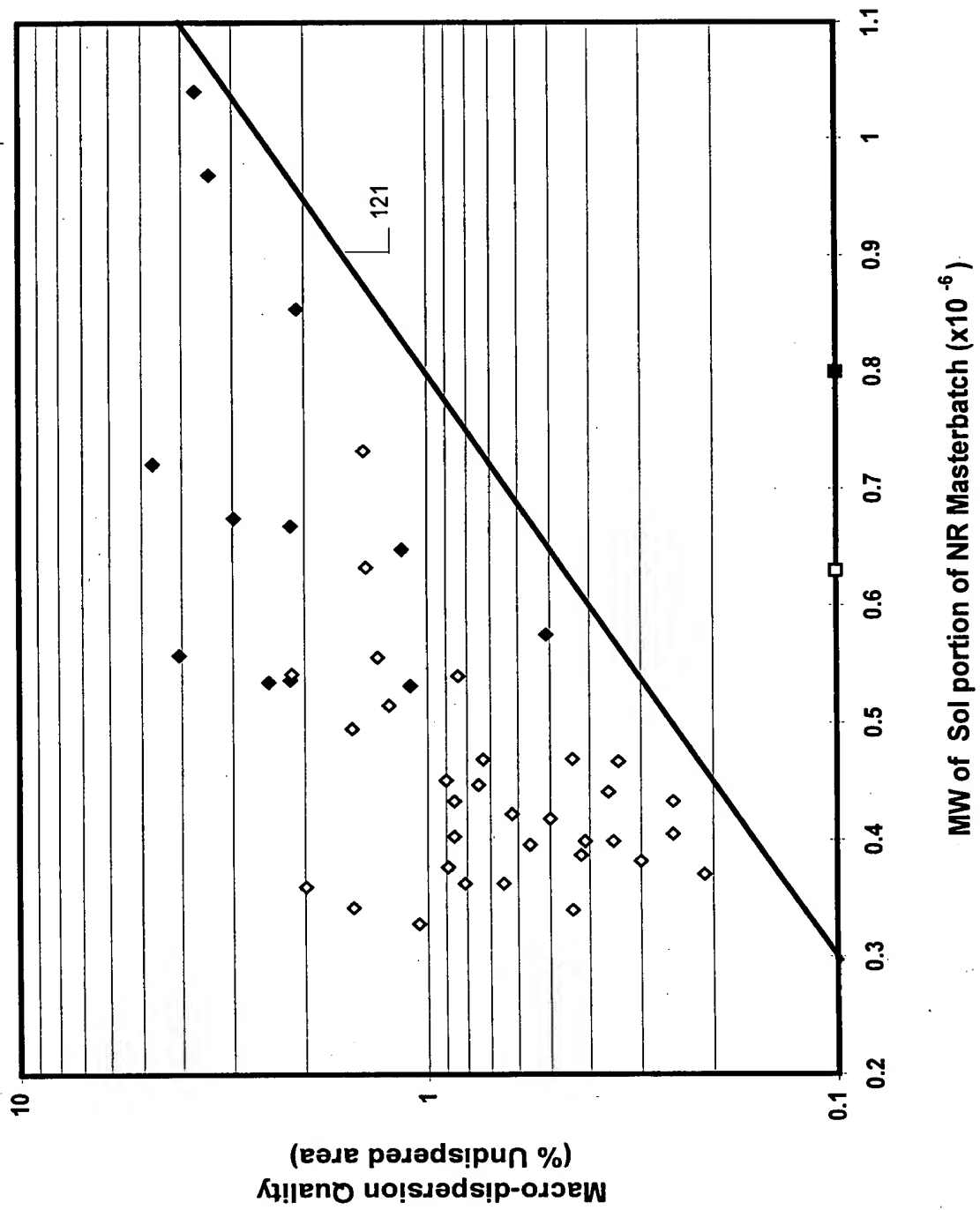


Figure 13 Dispersion Quality and MW<sub>sol</sub> of NR Masterbatches  
(N330 Carbon Black, 55 phr)

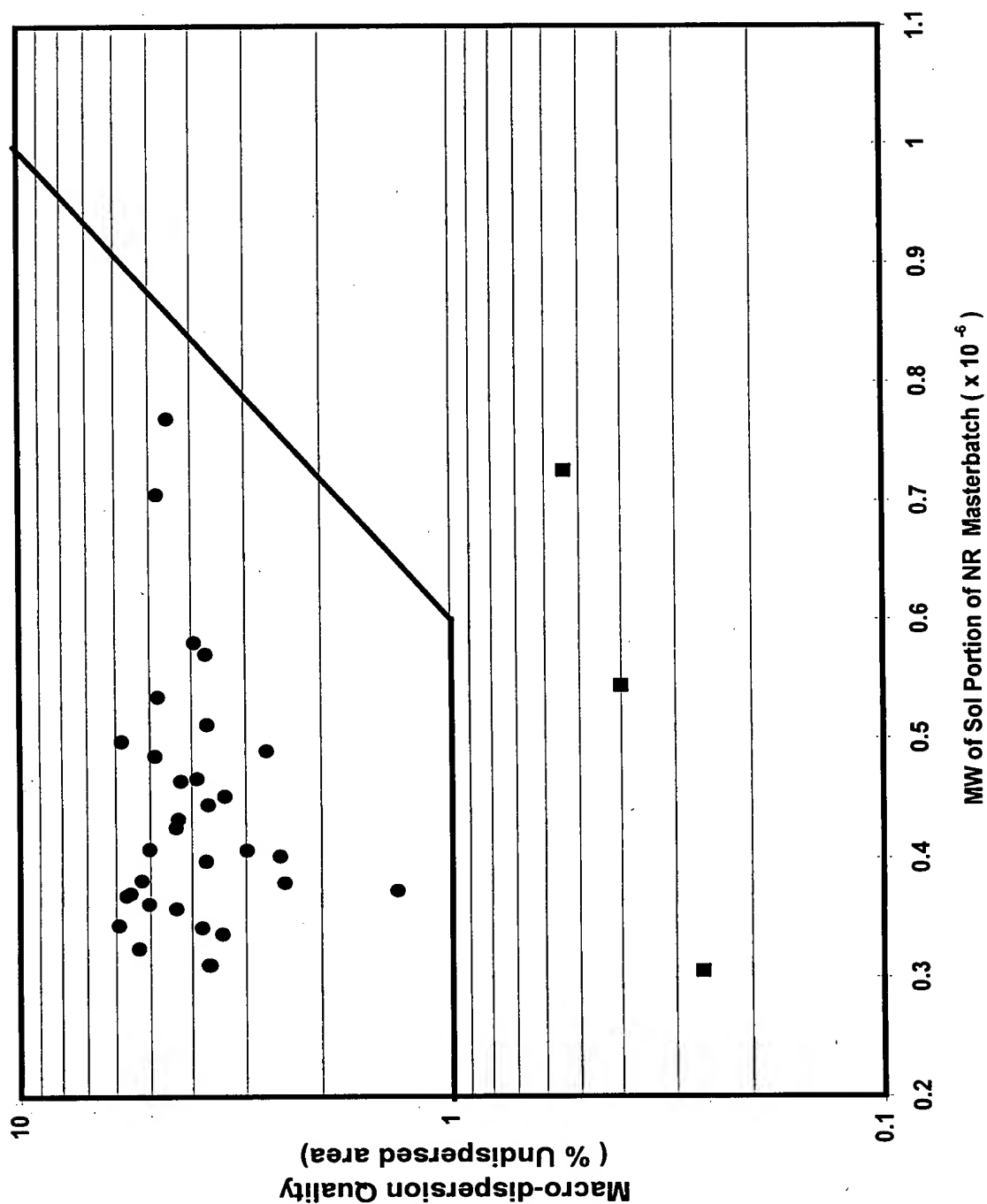


Figure 14 Dispersion Quality and MW Sol of NR Masterbatches  
(REGAL 250 Carbon Black)

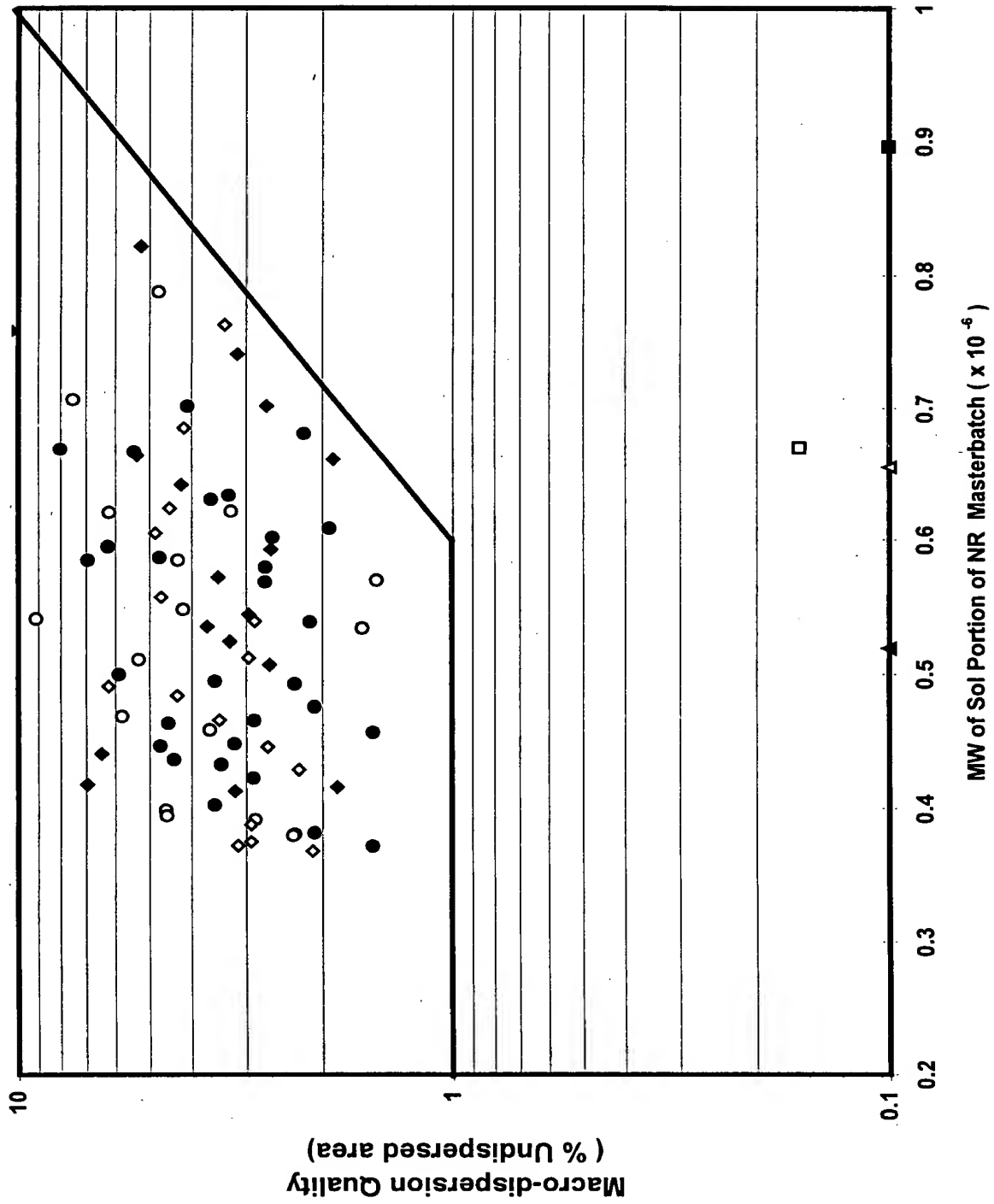


Figure 15 Dispersion Quality and  $MW_{sol}$  of NR Masterbatches  
(BLACK PEARL 800 Carbon Black, 55 phr)

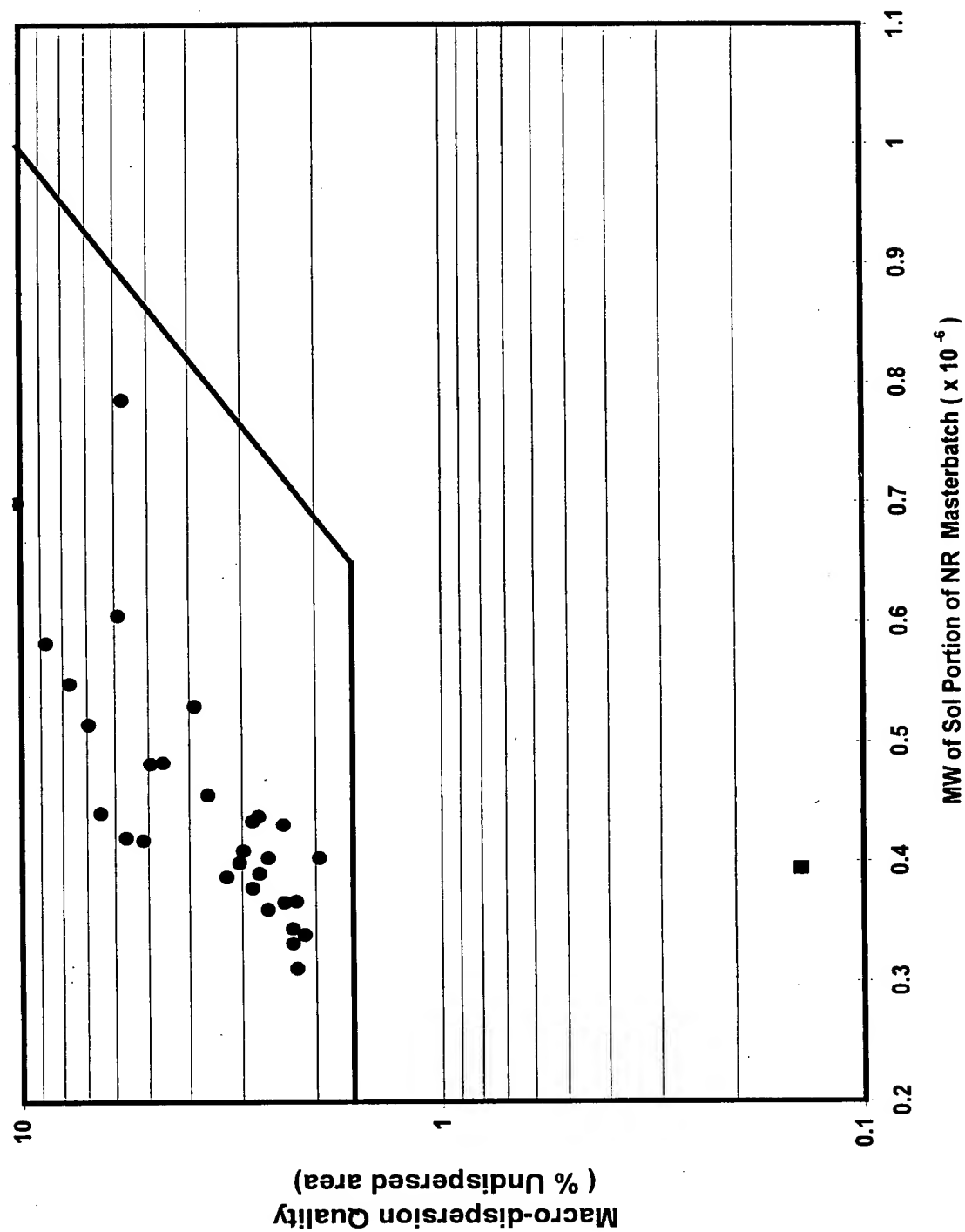
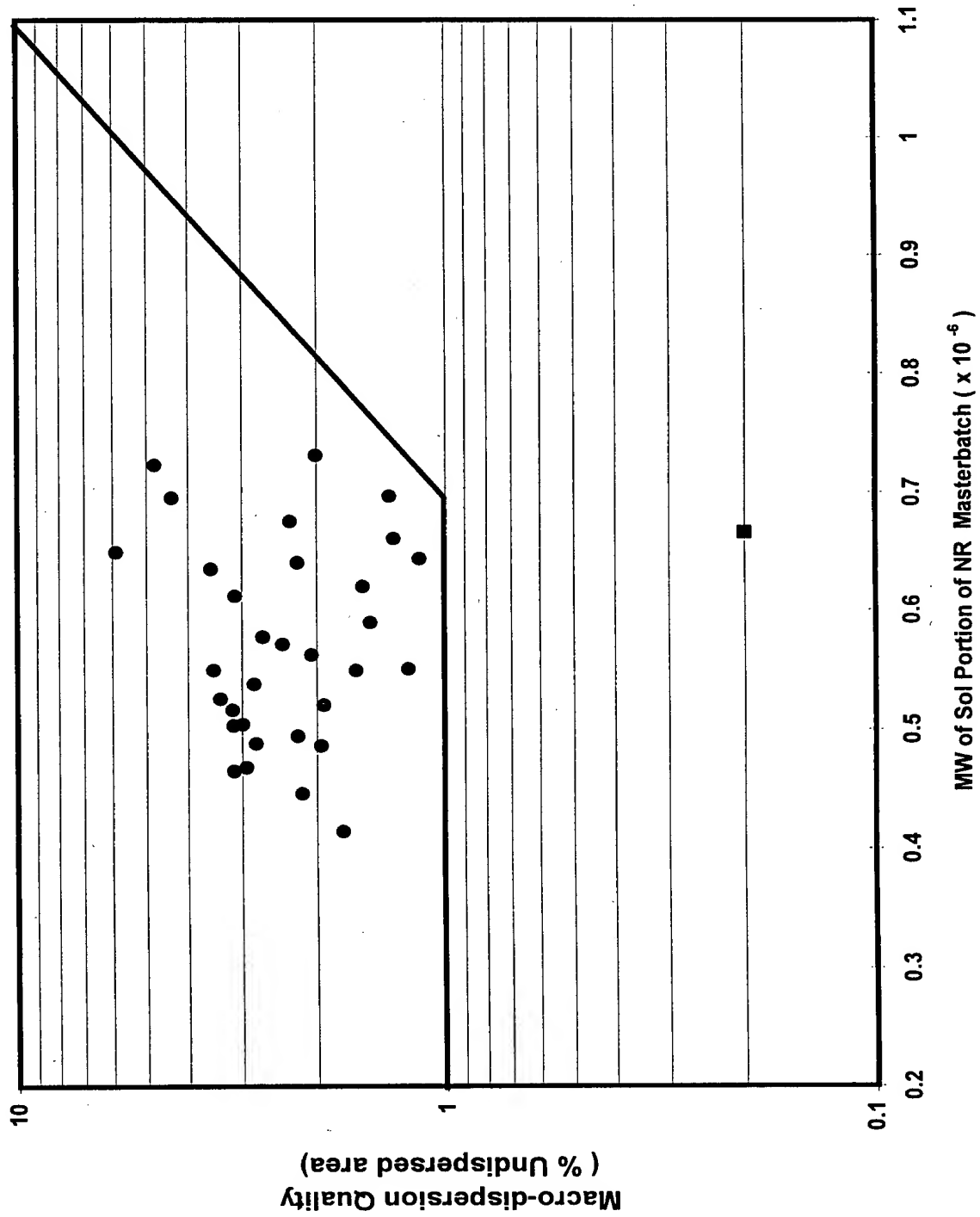


Figure 16 Dispersion Quality and MW Sol of NR Masterbatches  
(N326 Carbon Black, 55 phr)



4552ED" TTE2880

Figure 17 Dispersion Quality and MWSol of NR Masterbatches  
( REGAL 660 Carbon Black )

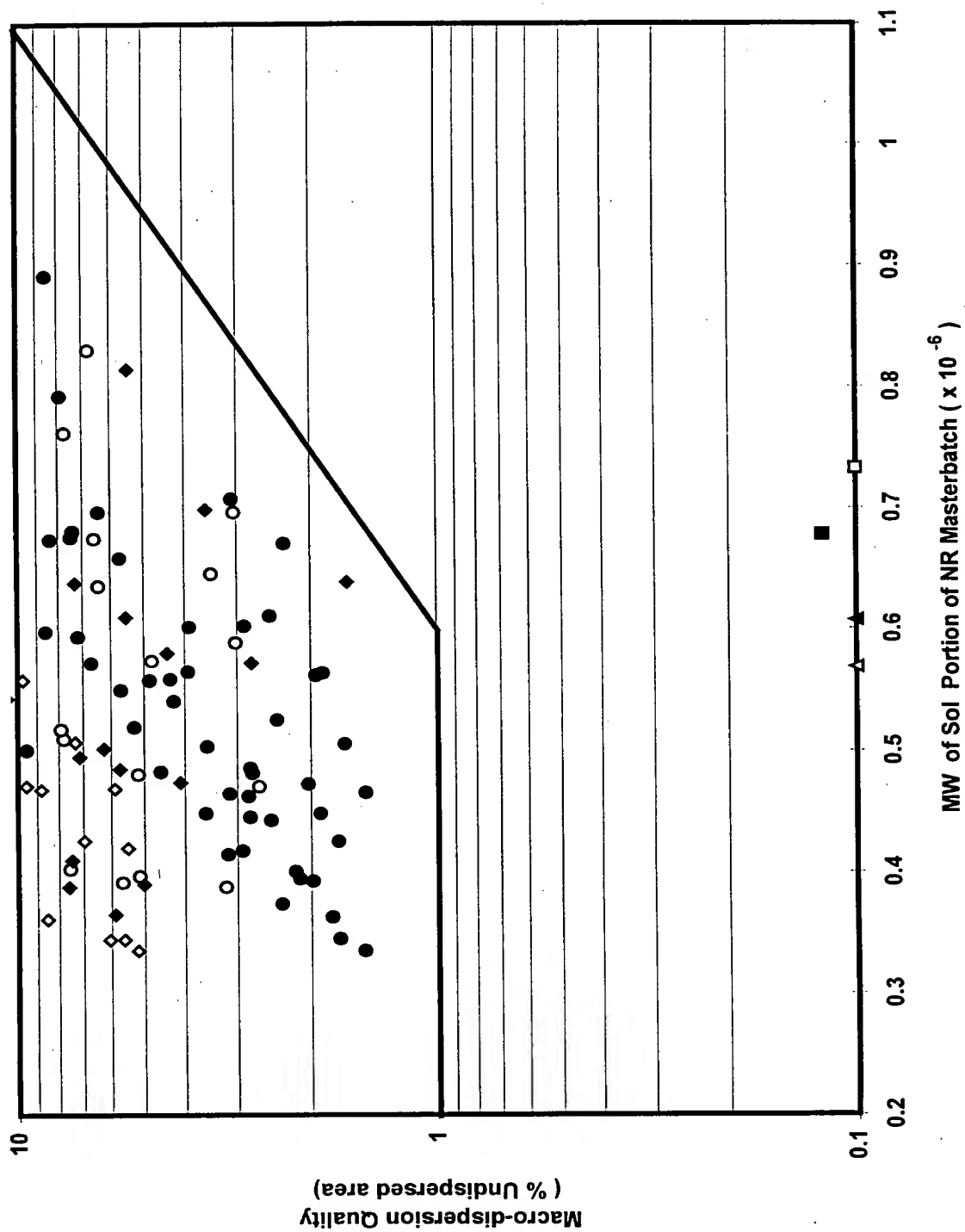




Figure 18 Dispersion Quality and MW sol of NR Masterbatches  
( N234 Carbon Black )

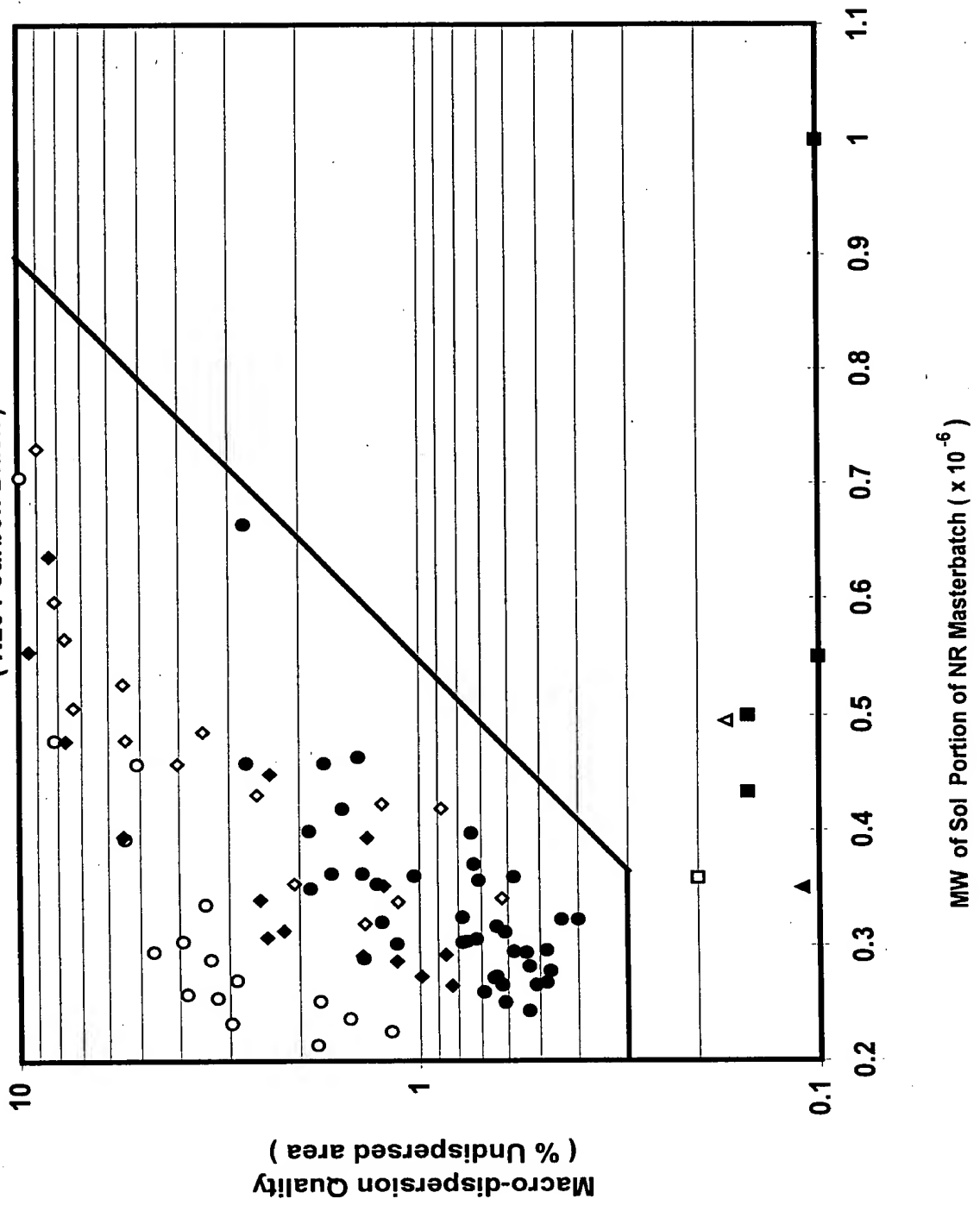


Figure 19 Dispersion Quality and MW Sol of NR Masterbatches  
(N110 Carbon Black, 55 phr)

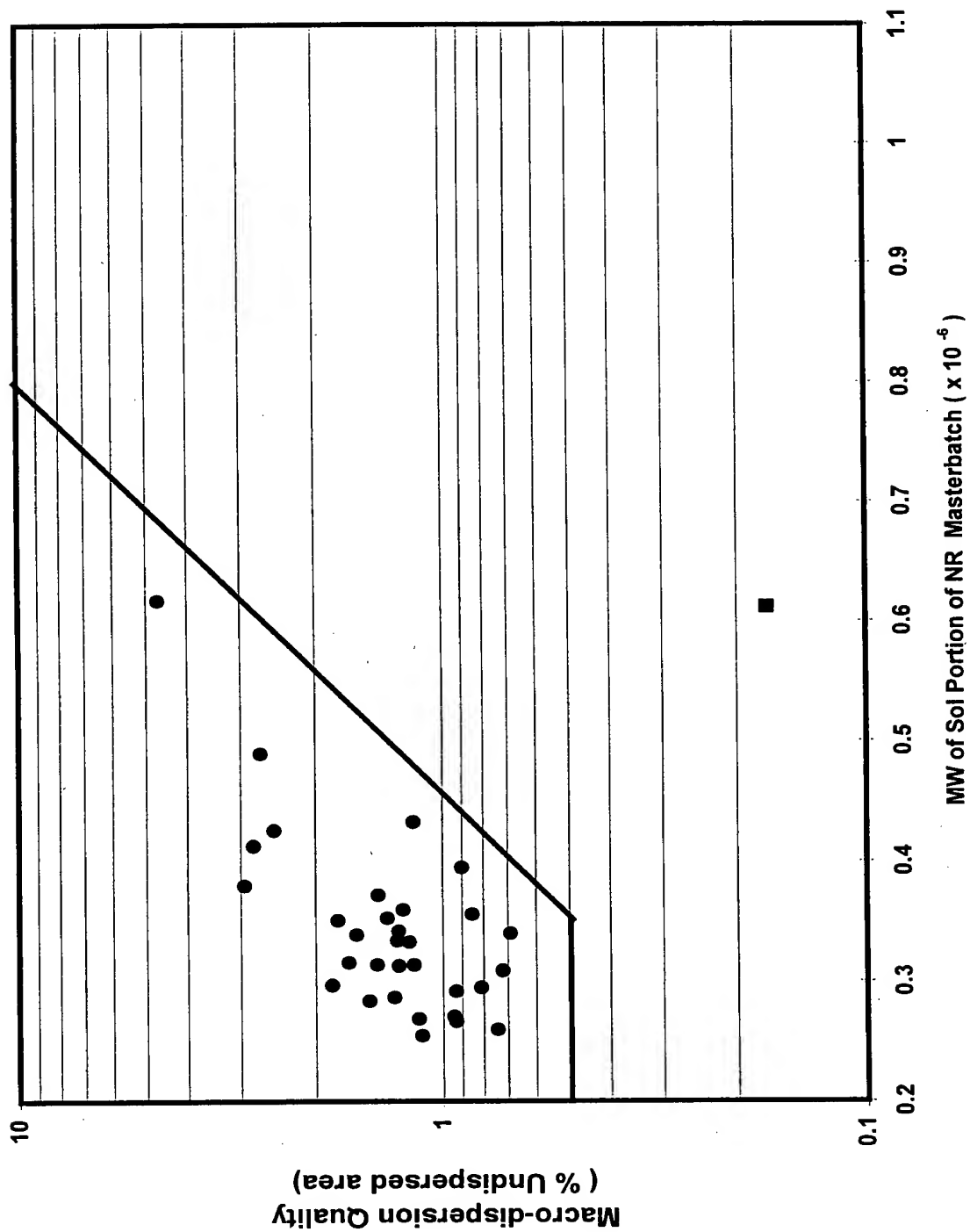


Figure 20 Dispersion Quality and  $MW_{sol}$  of NR Masterbatch  
( N351 Carbon Black, 33 phr )

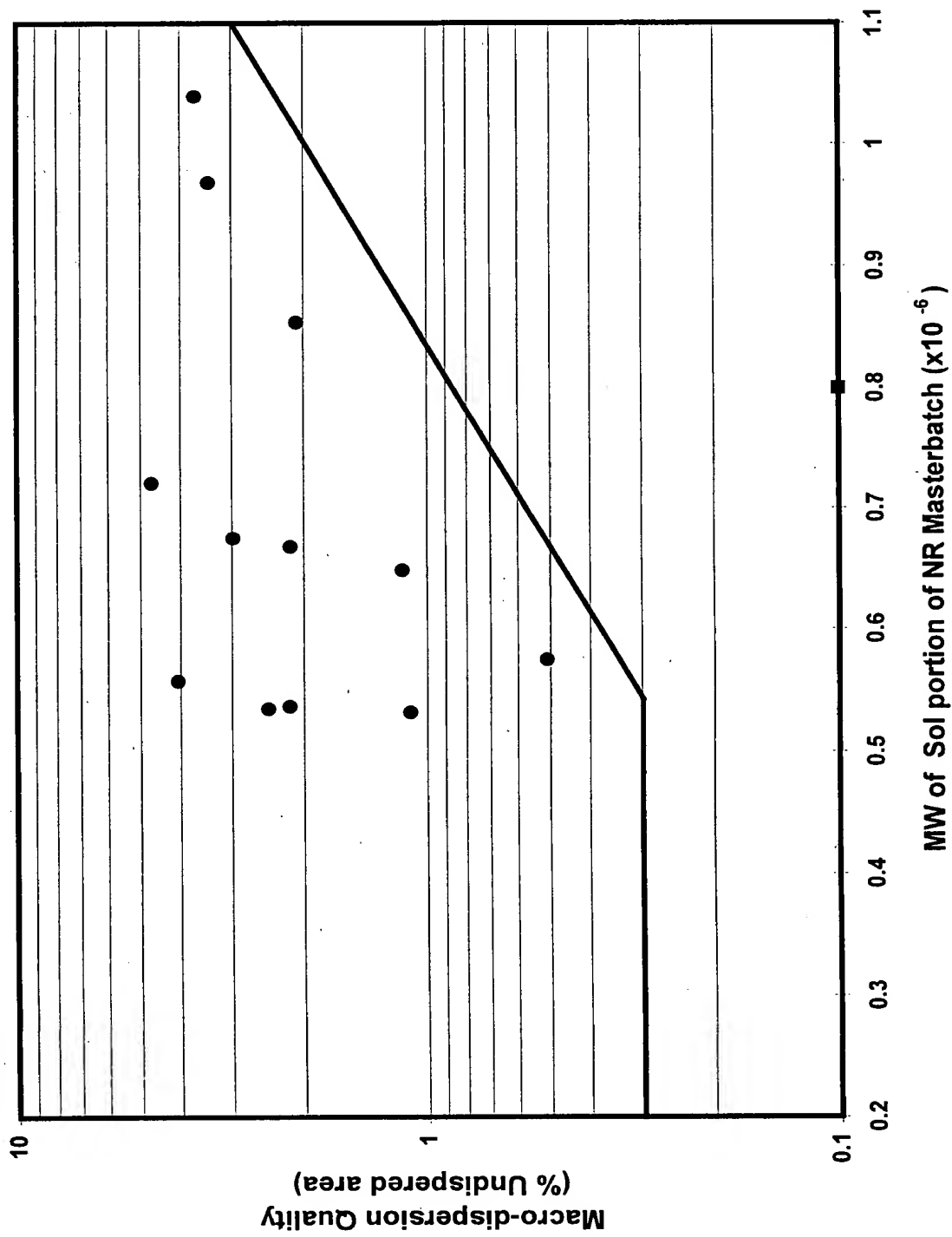


Figure 21 Dispersion Quality and MW Sol of NR Masterbatches  
(STERLING 6740 Carbon Black, 55 phr)

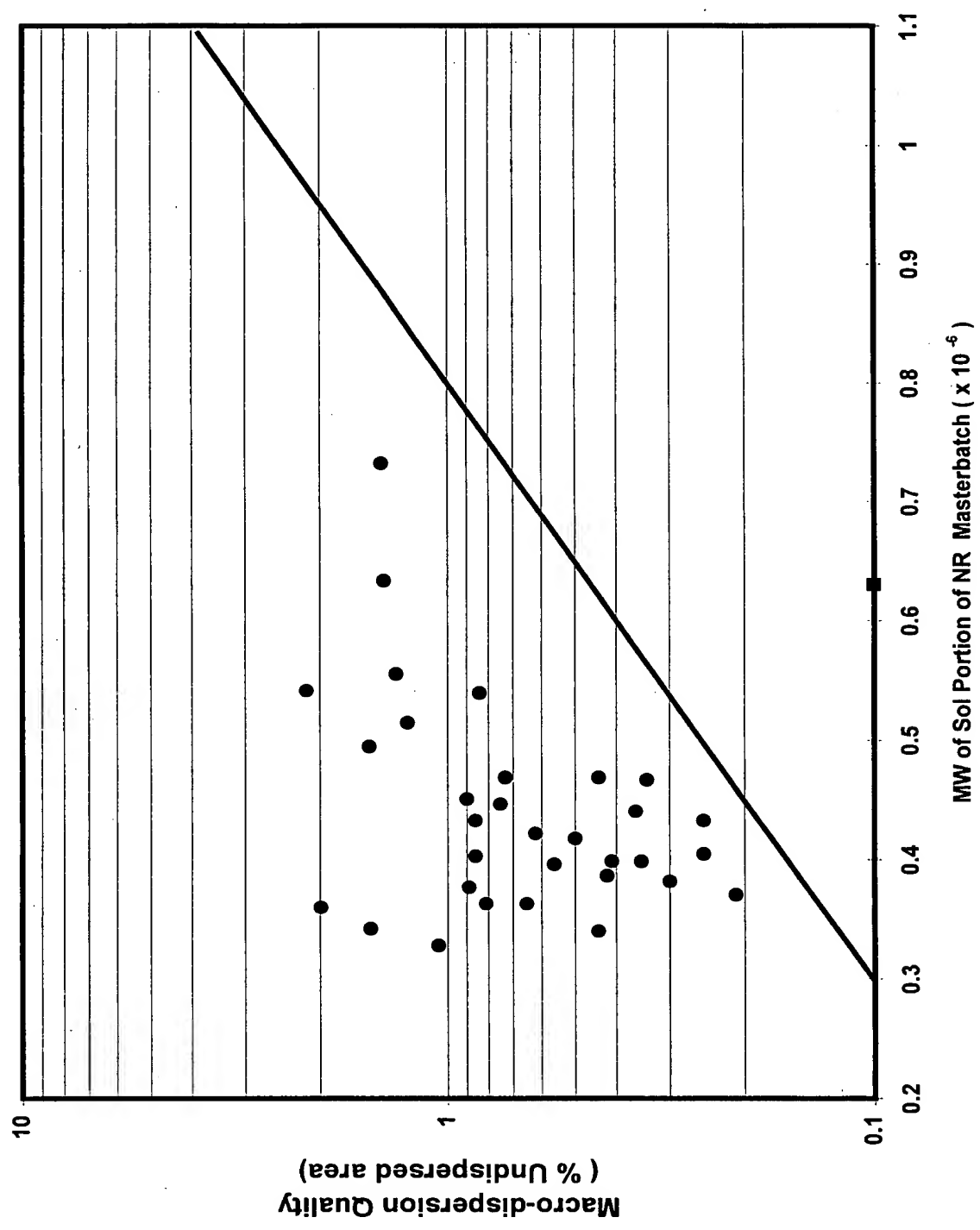


Figure 22 MW sol Effect on Crack Growth Rate  
(NR Compounds Containing N234 Carbon Black @ 55 phr Loading)

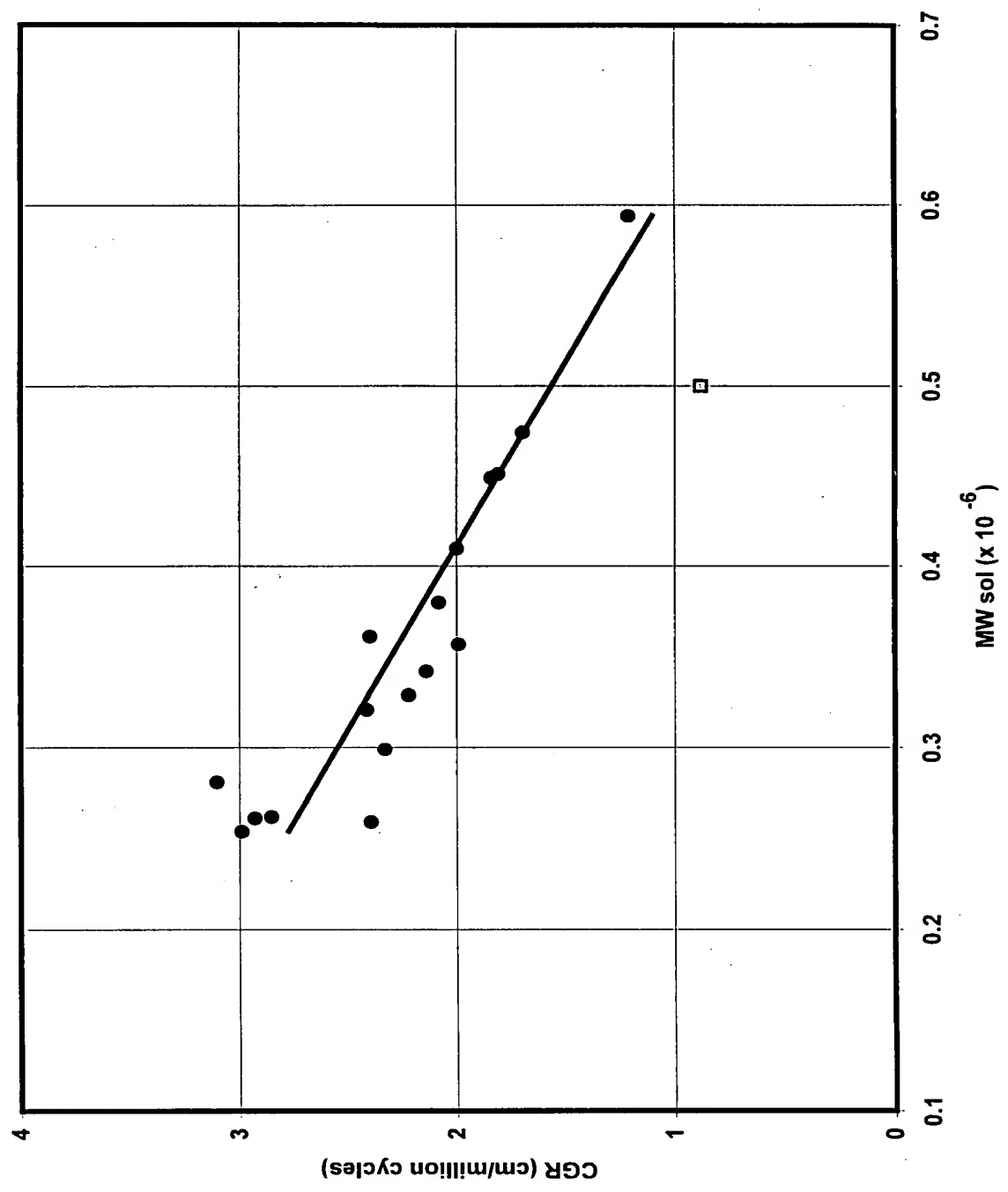


Figure 23 MW sol Effect on Crack Growth Rate  
(NR Compounds Containing N326 Carbon Black @ 55 phr Loading)

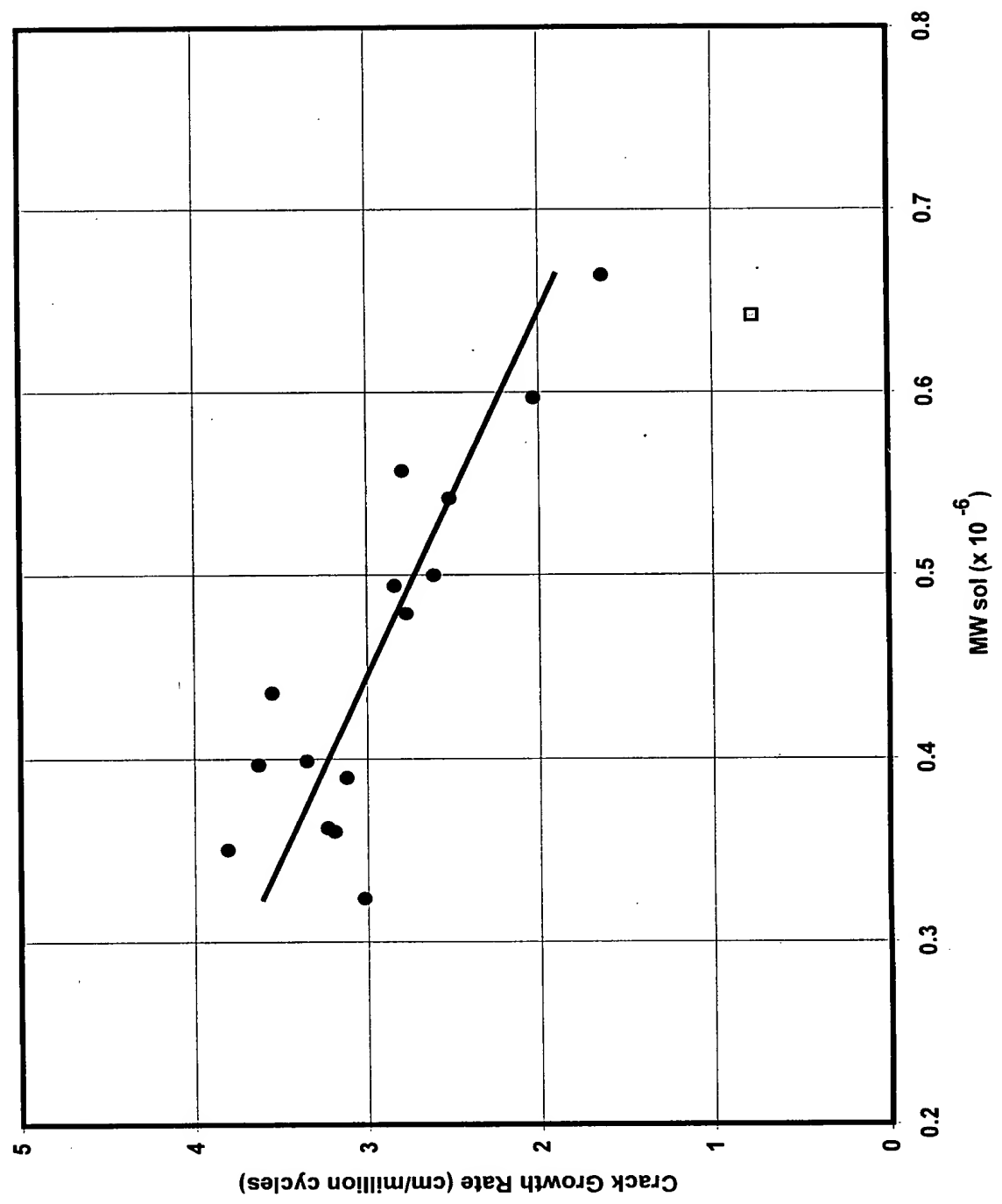


Figure 24 MW sol Effect on Crack Growth Rate  
(NR Compounds Containing REGAL 660 Carbon Black @ 55 phr Loading)

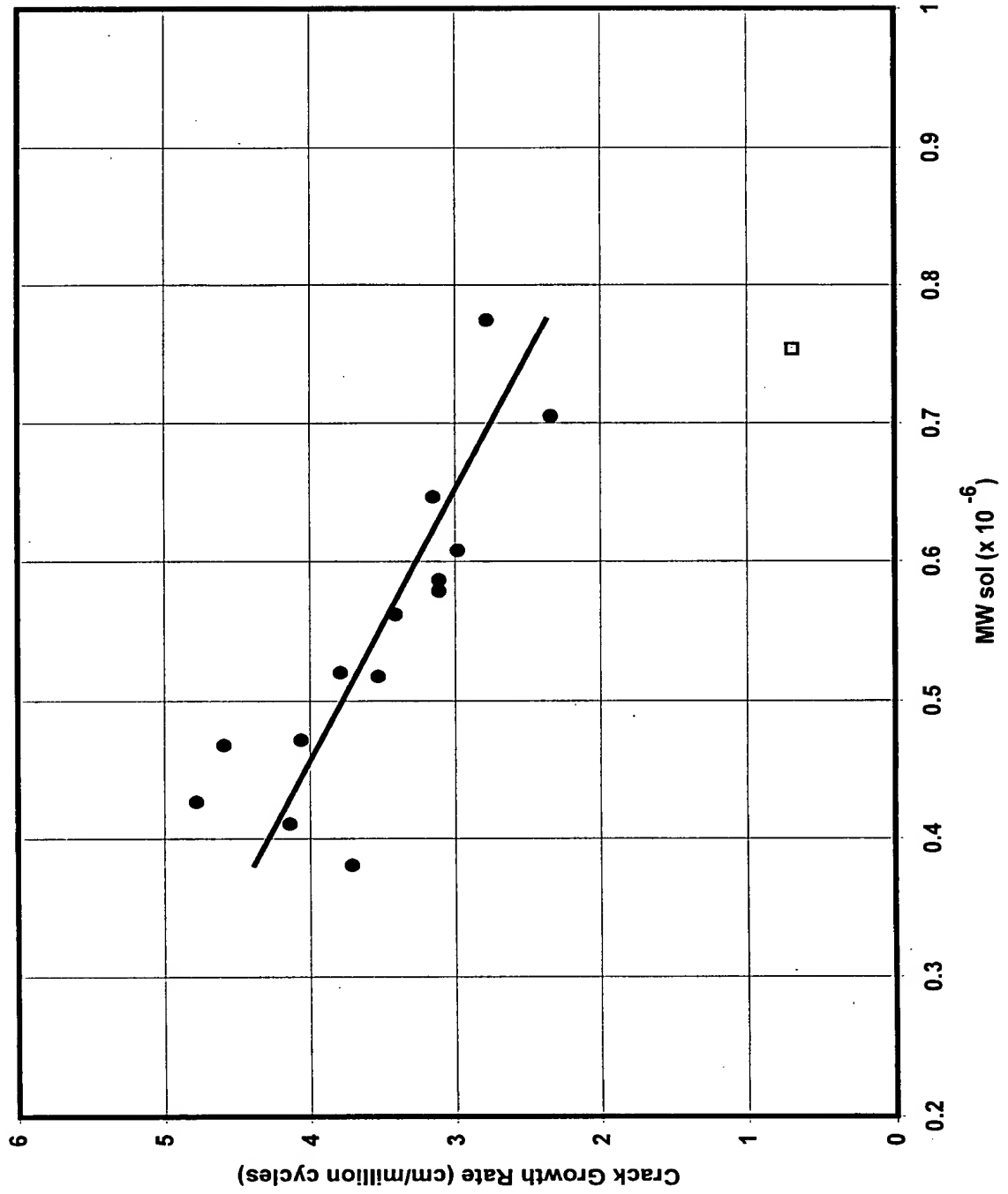


Figure 25    Max. Tan  $\delta$  (Strain Sweep @ 60°C) of NR Compounds Containing N234  
Black at Different Loadings

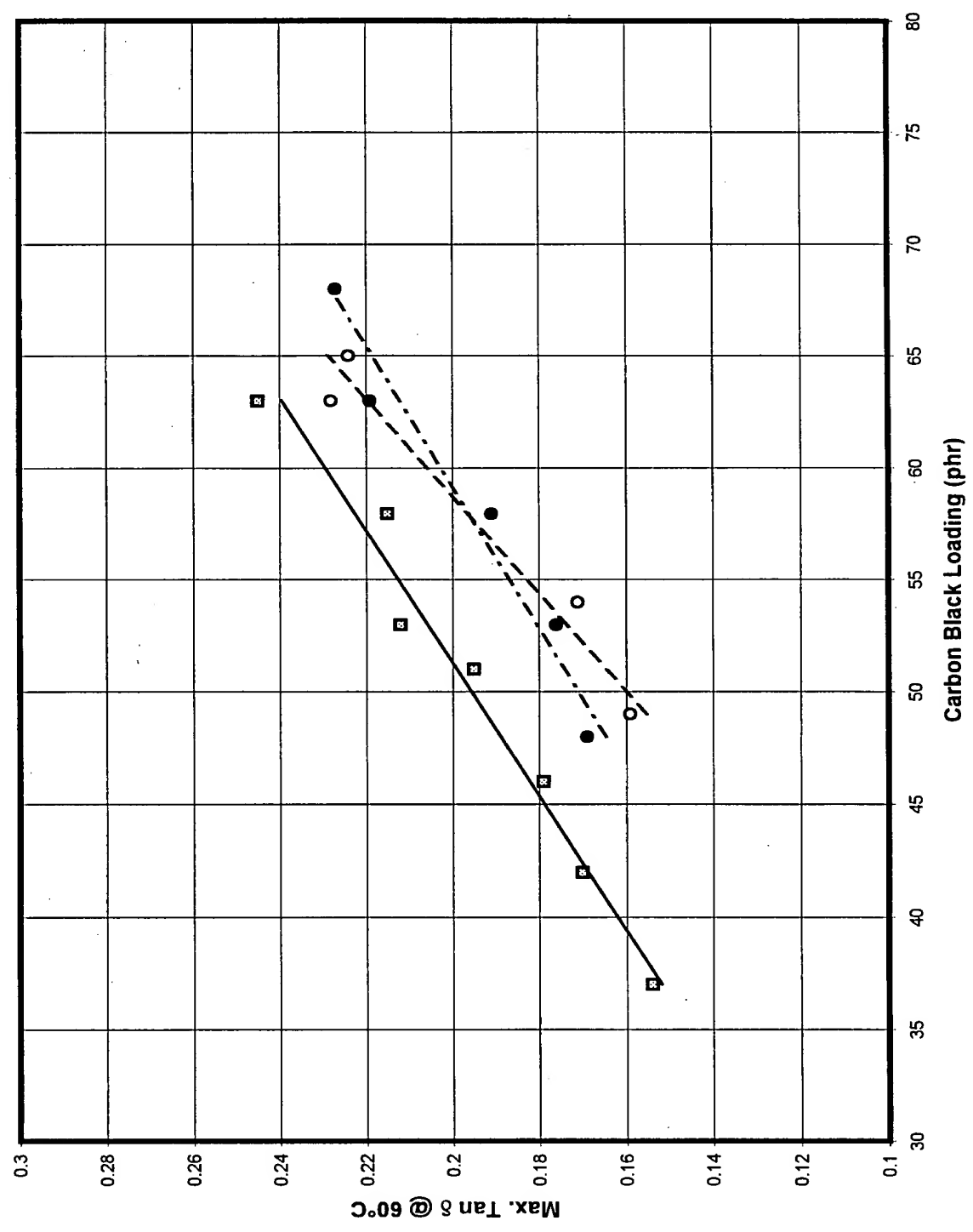




Figure 26. Carbon Blacks in NR Compounds for OTR Tread

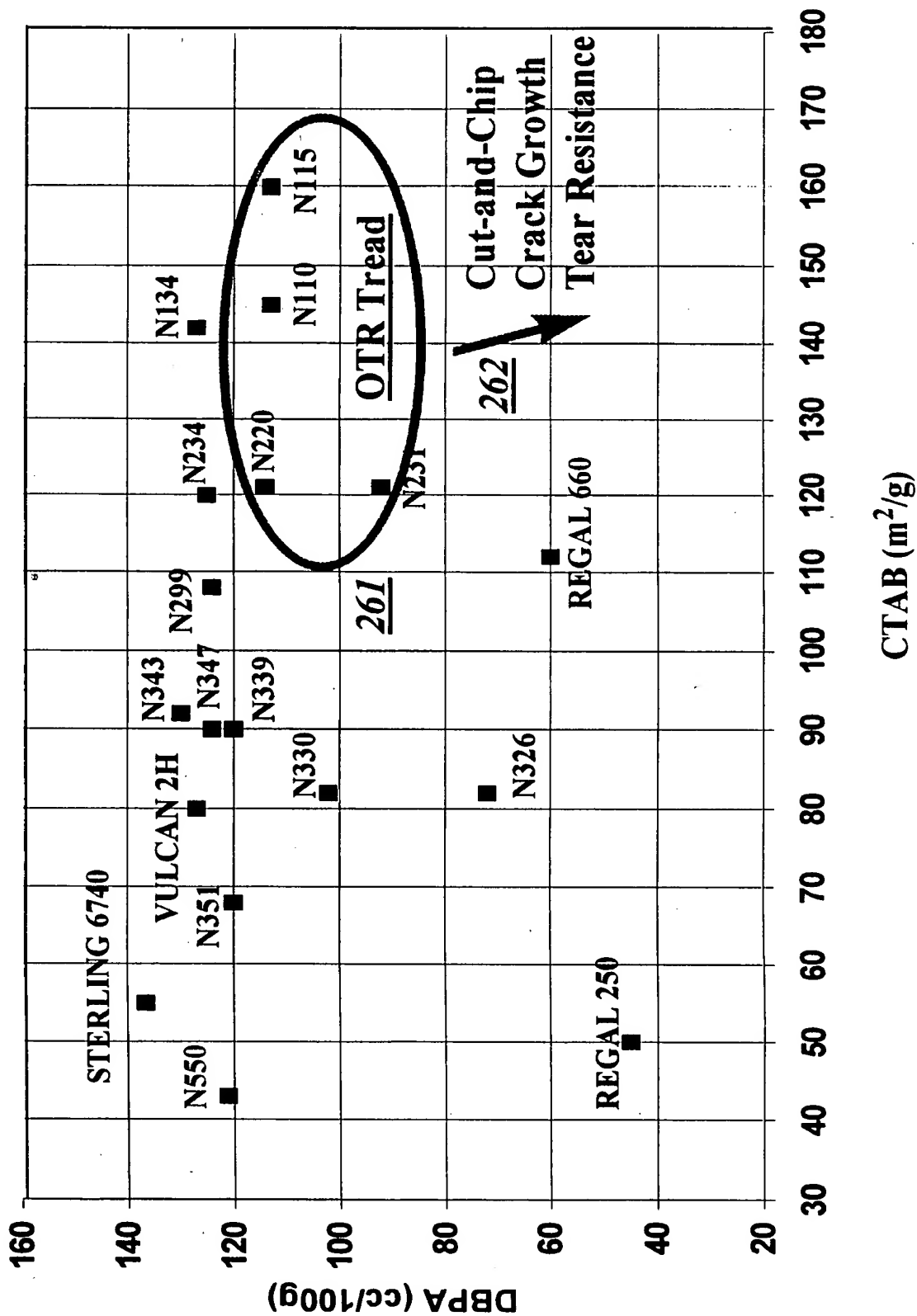


Figure 27. Carbon Blacks in NR Compounds for T/B Tread

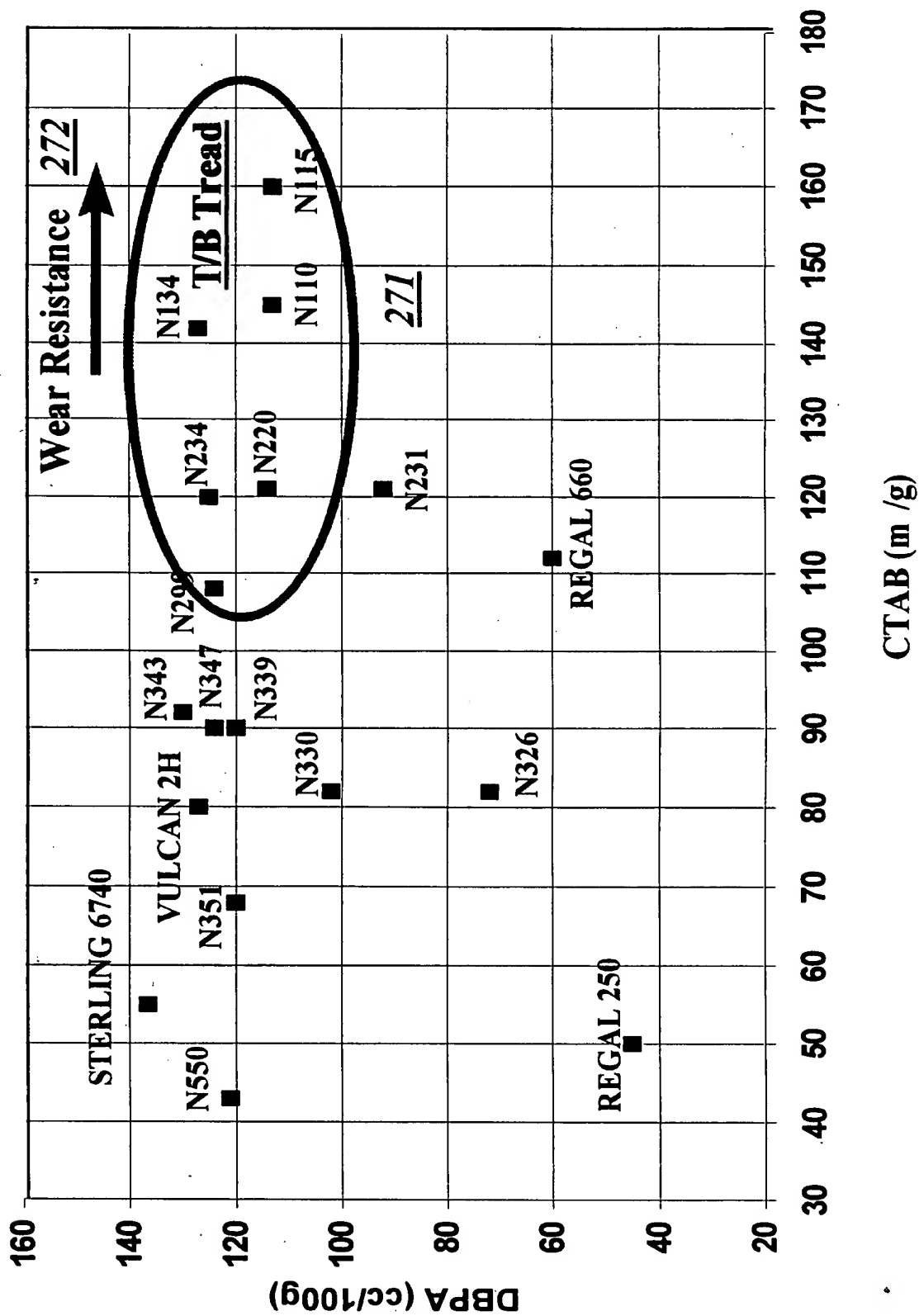


Figure 28 Carbon Blacks in NR Compounds for Tire Applications

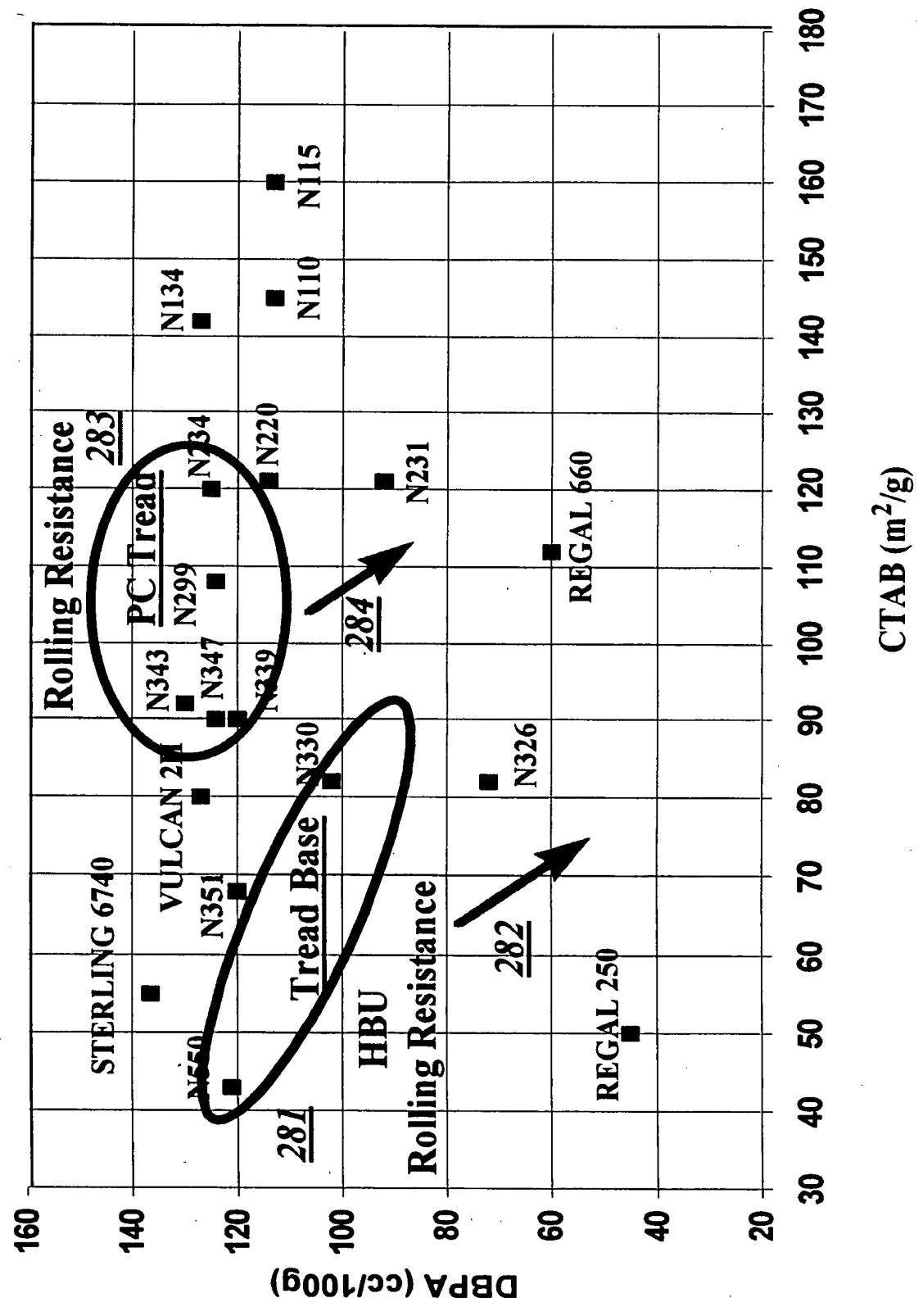


Figure 29. Carbon Blacks in NR Compounds for Tire Applications

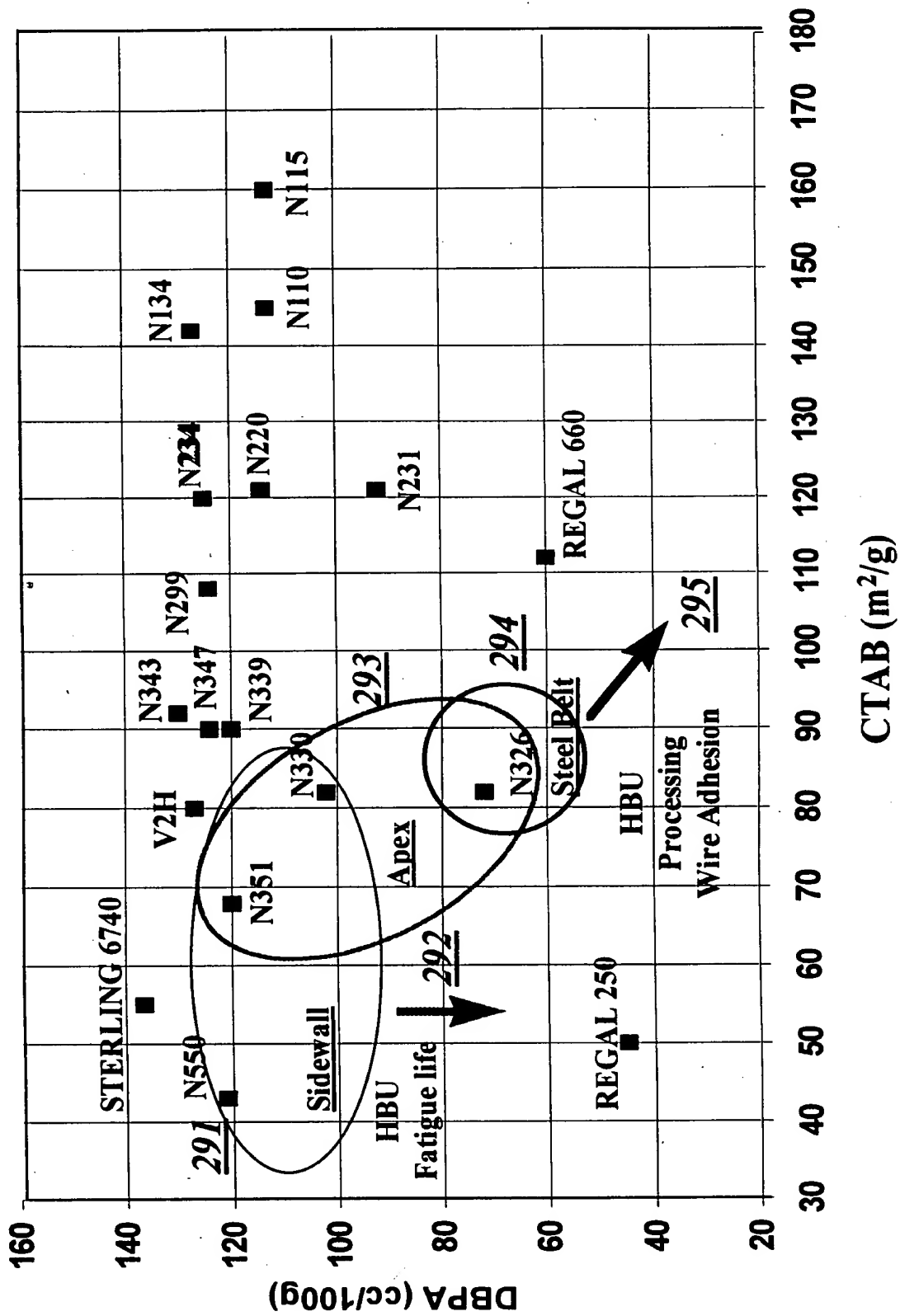


Figure 30 Macro-dispersion Quality and MW of Sol Portion of NR Masterbatch Containing Dual Phase (Carbon Black/Silica) Aggregates

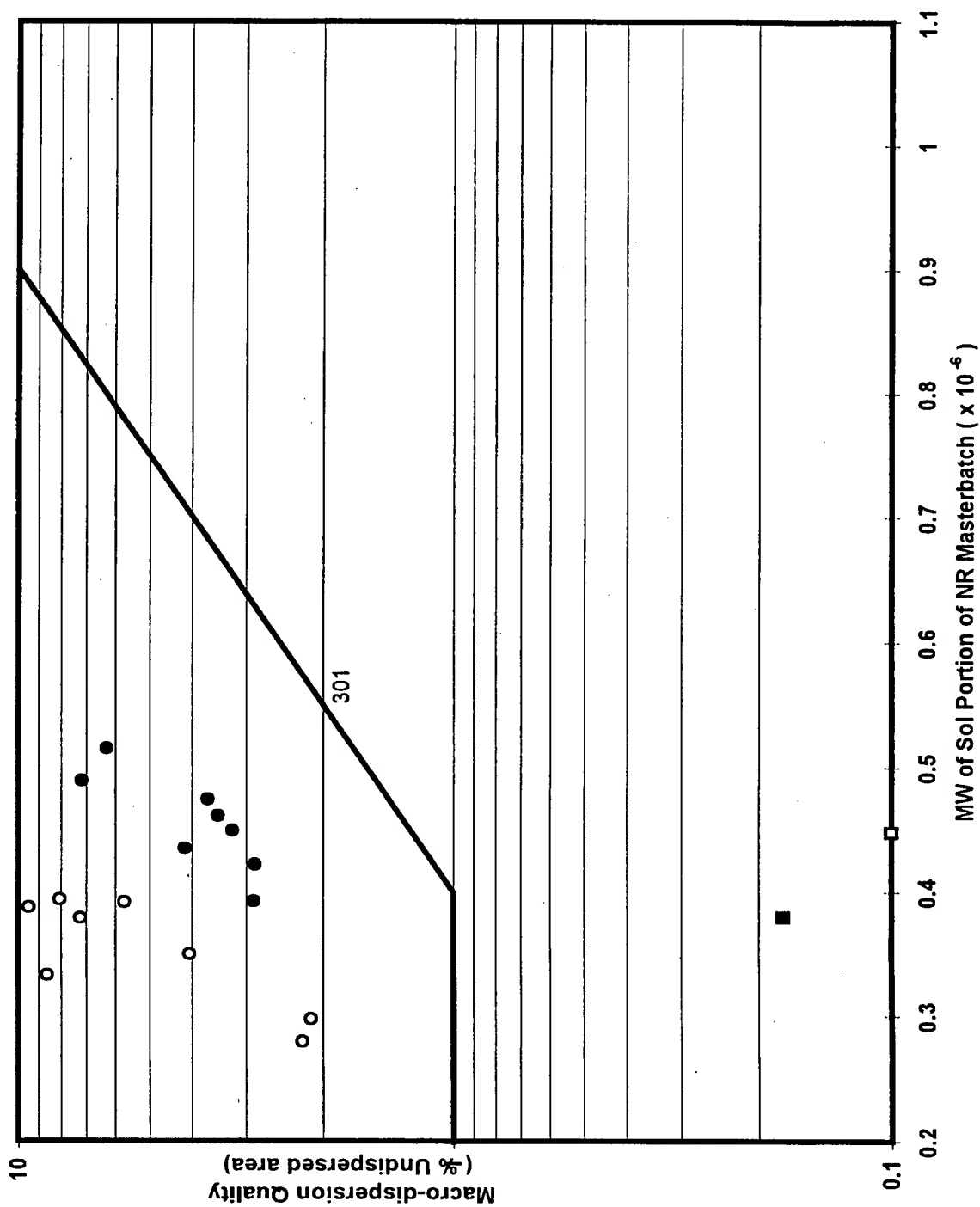


Figure 31 Macro-dispersion Quality and MW of Sol Portion of NR Masterbatch  
Containing Blend of Carbon Black and Silica

